

This is an IBM Rational podcast. I'm Angelique Matheny. Joining me is David Myers from Rational Software and he is the Rational Enterprise Tools Product Line Manger. He joins us today to talk about Enterprise Modernization and how Rational Developer for System z (RDz) and Rational Business Developer (RBD) can assist. The session will address what Enterprise Modernization entails, how RDz helps move applications toward a Services Oriented Architecture (SOA) for CICS, IMS, and other System z workload, and provide an introduction to EGL -- IBM's newest business language -- and how RBD makes creating Web, Web 2.0, and Web user interface to CICS/IMS applications easy. Key features and future direction of the products will also be discussed.

David, Welcome to the podcast.

We've covering a really good topic today so let's get to it.

David, let's start with this - What are some of the challenges customers are facing in building applications for the mainframe?

- 1) large application portfolios of existing applications
- 2) coupled architectures involving multiple platforms, middleware environments, and programming languages
- 3) lack of skills
- 4) IT needs to "Do more ... faster" (more agile -- responsive to business needs) These challenges are making business's look into modernizing their existing IT applications to try and better handle all the changes being requested by the business leaders.

David, What kind of tools do you have to help with modernization on the mainframe to address these problems?

- We have several tools to look at depending on the problem you need to focus on. A few were announced recently in the z10 launch. For example:
- RDz (Rational Developer for System z)
 - - helps maintain and modernize existing mainframe applications at the code level in COBOL, PL/I, C/C++, or HSM
 - - componentized applications
 - - tools for creating service oriented artifacts from existing applications and runtimes
- RBD (Rational Business Developer)
 - - (Skills Mismatch) "typically the people who have the most knowledge about the business domain are not the same who have the most knowledge about new programming models and new computing technologies, and vice versa"
 - - Helps mainframe-oriented developers ease into newer programming models like Web and Web 2.0

- - Helps extend existing applications easily to the web without Java
- - Provides an easy, high-productivity environment for creating new mainframe applications
- RTW (Rational Transformation workbench)
- - Helps analyze and understand existing applications
- - Helps componentize and refactor existing applications into service components
- HATs (Host access Transformation Services)
- - quickly takes existing screen-driven applications and creates new web applications or web services out of them

David, you mentioned a couple of tools. Tell me more about Rational Developer for System z

- RDz works with your assets that exist on the mainframe today, in the languages that have been driving your business application for 20-30 years.. We can connect out to your datasets and allow you to develop in real-time against your programs, but using tools based on eclipse that offer higher productivity than ISPF-based tools can offer. Now, when I say real-time, I mean when you save changes to your program ... it is saved back into your dataset on the host just as if you were using ISPF today. We know that your organization is not going to completely jump ship off of ISPF to start so we integrate into your existing processes and ways of thinking to ease that transition to eclipse.
- RDz offers a slew of tools for maintaining and extending existing mainframe applications. For example, we offer an enhanced editing experience with things like content assist and integrated syntax checking. We collect all the information that you normally have to go to 4 or 5 screens to gather and put it together in a single work view for you. For example, if I want to make a change to a COBOL program that needs a variable out of a copybook. In my editor I can right-click on open copybook and a new editor window will open up next to my existing showing the copybook from the host...or I could just ctrl-click and the list of working storage variables from the copybook will be displayed for me to choose from. Or say that I need to check if my program will compile. I can issue a syntax check and all the syntax errors will appear line-by-line in my errors list. No more switching to my job spool to track down a compile job and parse through the output listing. All these tools really help with the productivity of maintaining existing applications.
- But we also offer SOA tools. Like I mentioned before, we can create and deploy web services to the major host runtimes ... CICS, IMS, Batch, etc ... without changing any of your application code. This makes moving to a service oriented architecture very low risk and very low cost. We have some wizard-driven tools that can inspect your code, allow you to pick out the variables you want as input and output ... then click "finish" and bam...you have a service. Also, we have some new tools coming that will automatically let you deploy the services out for testing.. given appropriate permission from your system programmer of course ...

- RDz is great because we integrate into what you have today ... whether that be your existing runtimes, programming languages, processes, or SCMS. We don't require new runtimes or new personnel to manage.

That's a lot. So what about Rational Business Developer?

- IBM Rational Business Developer v7.1 (RBD) delivers the latest version of EGL, which is the newest IBM business language for the System z development community... along with the Eclipse based EGL IDE. EGL is a modern language that shields programmers from the technical intricacies of web and SOA development, and with this release we are adding several enhancements that make it even easier to build modern business critical mainframe solutions
- Many of you may not know about EGL. EGL itself has been designed from the ground up to support modern computing requirements and it was introduced in the marketplace only a couple of years ago...so it is certainly not yet as well known as some of the languages that I mentioned before ... however, EGL is the culmination of over 25 years of IBM R&D in the area of business oriented languages like the Informix 4gl and VisualAge Generator, which are used by thousands of customers worldwide.. We are seeing a tremendous interest in the marketplace and the EGL user community has been growing, so it will not be too long until it reaches wider industry recognition.
- EGL is a high-productivity environment and language that allows your company to build a business-oriented staff of developers that can use the same language to develop CICS or IMS applications as well as Web and Web 2.0 applications. Its really easy to learn. We have co-ops here at IBM that picked up the tool and started writing CICS applications in 2 weeks, for example. This really helps address the skills problem we talked about before. I can use my existing staff to move into new arenas while modernizing my applications. Also, EGL does not require its own runtime, it actually deploys to the runtimes that you have today ... like CICS, IMS, or WAS. This tool is the next step up for mainframe development.

How is Rational Business Developer different than Rational Developer for System z?

- RDz allows you to take the applications you have today in COBOL, PL/I, C/C++, and HSM and maintain/modernize your core applications. While with RBD, you can leverage skills and people you have today to work on modernizing new applications which can interoperate with your core applications. RDz == what I have now, RBD == easy road to the future.

How are customers using RDz and RBD and what are they saying?

- - Eclipse-based tools easily allow integration into the existing shop processes, or customization to do so
- - facilitate involvement with distributed teams via shared interfaces

- - Productivity improvements and cost savings with MIPs reductions
- - Moving to SOA architectures easily
- - recruiting tool for new developers

I am sure the audience would be interested in hearing about the new enhancements. Can you fill us in on what's new to RDz and RBD?

- RDz includes support for the latest versions of CICS (V3.2) and IMS (V10)
- - integration with more of IBM's lifecycle tools -- like File Manager for browsing/editing VSAM datasets from a GUI interface, or Fault Analyzer for performing ABEND analysis
- - More support for web service creation -- like creating services for PL/I programs
- - support for the latest mainframe compilers
- - RBD now supports MQ as well as Batch and CICS applications
- - New BIRT-based report generation features for simplifying report creation in HTML or PDF
- - Support for including EGL created content in WebSphere Portal applications
- - Some Web 2.0 support for features like AJAX from web pages
- Have ibm.com/rational/modernization setup with "sandboxes" to go and try out the tools before you buy. You can log in and we'll setup and virtual workspace for you to connect out to the host and run through some tutorials on either of the tools.

David, I think a good closing question is what are some of the future plans for the tools?

- - Easier and less costly mainframe development -- some tech previews coming out on our website
- - More verification of code during editing resulting in fewer compiles
- - One-click deploy of mainframe applications
- - Code generation from UML resulting in COBOL skeletons, or even complete applications
- - More code insight, providing more information to developers on how their code interacts with other parts of the system
- - EGL Rich web applications -- create a web 2.0 application using EGL technology and no Java skills
- - better support for IMS applications

MATHENY: That was Rational's David Myers, Product Line Manager for Rational Developer for System z. David, thank you again for taking time out to discuss Next Generation Mainframe Applications with Rational Developer for System z and Rational Business Developer We appreciate it.

MATHENY: For more information on this topic, check out the URL ibm.com/rational/modernization. There's also a great webcast titled Application Development Tools for the Mainframe. This has been an IBM Rational podcast. I'm Angelique Matheny. Keep tuning is as Rational Talks to You.

[END